APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,895	08/06/2001	George Valhath	212425US99	8838

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EXAMINER
COLEMAN, WILLIAM D

ART UNIT	PAPER NUMBER
2823	

DATE MAILED: 03/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1 136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U S C § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b)

Status

1) [×] Responsive to communication(s) filed on _06 August 2001_ .

2a) [ ] This action is **FINAL**.   2b) [×] This action is non-final.

3) [ ] Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) [×] Claim(s) _1-29_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) [ ] Claim(s) _____ is/are allowed.

6) [×] Claim(s) _1-29_ is/are rejected.

7) [ ] Claim(s) _____ is/are objected to.

8) [ ] Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) [ ] The specification is objected to by the Examiner.

10) [ ] The drawing(s) filed on _____ is/are: a) [ ] accepted or b) [ ] objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) [ ] The proposed drawing correction filed on _____ is: a) [ ] approved b) [ ] disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) [ ] The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) [ ] Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) [ ] All b) [ ] Some * c) [ ] None of:

        1. [ ] Certified copies of the priority documents have been received.

        2. [ ] Certified copies of the priority documents have been received in Application No. _____ .

        3. [ ] Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) [ ] Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) [ ] The translation of the foreign language provisional application has been received.

15) [ ] Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) [ ] Notice of References Cited (PTO-892)

2) [ ] Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) [×] Information Disclosure Statement(s) (PTO-1449) Paper No(s) _2_ .

4) [ ] Interview Summary (PTO-413) Paper No(s). _____

5) [ ] Notice of Informal Patent Application (PTO-152)

6) [ ] Other: _____

DETAILED ACTION

Double Patenting

1.   A rejection based on double patenting of the "same invention" type finds its support in

the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and

useful process ... may obtain a patent therefor..." (Emphasis added). Thus, the term "same

invention," in this context, means an invention drawn to identical subject matter. See Miller 1..

Eagle Mfg. (.-o.. 151 U.S. 186 (1894), In reCrocket245 F.2d 467, 114 USPQ 330 (CCPA 1957);

and In re Fogel422 F.2d 438, 164 USPQ 619 (CCPA 1970).

2.   A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by

canceling or amending the conflicting claims so they are no longer coextensive in scope. The

filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35

U.S.C. 101.

3.   The nonstatutory double patenting rejection is based on a judicially created doctrine

grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

harassment by multiple assignees. See Iii re Goodman I I F. 3 d 1046, 29 USPQ2d 20 10 (Fed.

Cir. 1993); 111 i-e Lotigi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re f,'all Ornlini, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); 111 re P'ogel, 422 F.2d 4'18, 164 USPQ 619 (CCPA

1970)-and, Iti i-e Thoriti-,loit, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome

an actual or provisional rejection based on a nonstatutory double patenting ground provided the

conflicting application or patent is shown to be commonly owned with this application. See 37

CFR 1.130(b).

4.   Effective January 1, 1994, a registered attorney or agent of record may sign a terminal

disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b)

37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain

conflicting claims, elimination of such claims from all but one application may be required in the

absence of good and sufficient reason for their retention during pendency in more than one

application.

5.   Claims 1-29 are rejected under the judicially created doctrine of obviousness-type double

patenting as being unpatentable over claims of various U.S. Patents and Applications to

Assignee.

6.   Double-patenting conflicts exist between claims of the following related issued patents

and co-pending applications which includes the present application.

09273929	09755691	09882063	09906138	09911415	09921905	10017796
09274268	09758723	09882064	09906730	09911446	09921910	10020898
09425945	09766946	09882067	09906769	09911447	09924481	10020900
09465623	09780119	09884082	09906782	09911448	09927393	10026446
09584601	09795781	09884149	09906789	09911455	09927395	10026812
09607207	09801881	09884150	09906784	09911456	09928056	10053588
09607236	09813779	09884981	09907703	09911457	09929018	10059409
09607237	09822499	09884982	09907704	09911458	09929019	10059411
09607239	09822499	09884983	09907705	09911459	09929020	10062429
09607386	09824250	09885409	09907707	09911460	09929021	10076450
09607408	09824274	09897759	09908695	09911464	09929022	10093452
09607422	09824376	09897128		09911465	09929024	10124460
09607434	09824384	09892900		09911466	09929261	10125410
09607222	09825615				09929245	10127454

7.   While it is true that the Examiner has the burden to show how a rejection is specifically

applied to each claim, the exemplary showing with respect to the claims individually discussed

below establishes a prima facie showing of the unpatentability of the instant claims and is

sufficient to give the applicant fair notice of how the rejection is applied to each and every other

claim. Further, an analysis of all of the claims in the approximately 330 related applications

would be an extreme burden on the Office requiring millions of claim comparisons. Accordingly,

the Office is shifting the burden to the applicants to show, if they can, patentable distinctions

between the instant claims and those of the other applications and patents. Specifically, in order

to resolve the conflict between applications, applicant is required to:

(1) file terminal disclaimers in each of the related, applications terminally disclaiming each of

the other approximately 330 applications;

(2) provide a statement attesting to the fact that all claims in the approximately 330

applications have been reviewed by applicant and that no conflicting claims exists between the

applications. Applicant should provide all relevant factual information including the specific

steps taken to insure that no conflicting claims exist between the applications-, or-,

(3) resolve all conflicts between the claims in the above identified approximately 330

8   applications by identifying how all the claims in the instant application are distinct and

separate inventions from all of the claims in all of the other approximately '330 identified

applications. Note: the examples provided below are merely illustrative of the overall problem.

Only addressing/correcting the specifically identified conflicts would not satisfy the requirement.

Further, due Applicant's better familiarity with the related applications. Applicant now has the

burden of confirming that the preceding list is accurate and complete, or must take appropriate

action(s) to assure that no such conflicts exist in any other applications that have been inadvertently omitted from the preceding list, but do in fact possess related subject matter. Applicant is reminded that obviousness-type double patenting analysis entails a two-step process– (1) the claims of this application and the other approximately 330 applications must be construed; and (2) the claims of this application must be compared with the claims of the other applications to determine whether the differences in subject matter between the two claims render the claims patentably distinct. See.Georgia-Pacific Corp. v. United States Ciypsum Co., 195 F.3d 1322, 1326, 52 USPQ2d 1590, 1593 (Fed. Cir. 1999), and General Foods Co[p. v. Studiengeselischaft Kohle, 972 F.2d 1272, 1279, 23 USPQ2d 1839, 1844 (Fed. Cir. 1992). As the Court of Customs and Patent Appeals (CCPA) explained: "[t]he fundamental reason for the rule [against "double patenting"] is to prei)et7l itt!iit.s~l~fied linieivise extensi017 (?f the right to excli.ide granted by a patent no matter how the extension is brought about." In re Van Ornum, 686 F.2d 937, 943-44, 214 USPQ 761, 766 (CCPA 1982) (brackets and emphasis in the original) (quoting In re Schneller, 397 F.2d 350, 354, 158 USPQ 210, 214 (CCPA 1968)).

9.   Failure to comply with the above requirement will result in abandonment of the application. However, the requirement will be held in abeyance until allowable subject matter has been indicated by the examiner.

The following claim comparisons are examples of conflicts between three of the copending applications:

S.N. 09/908,892, claims I I

A process for fabricating a semiconductor structure comprising:

providing a monocrystalline silicon substrate"

depositing a monocrystalline perovskite oxide film overlying the monocrystalline silicon

substrate, the film having a thickness less than a thickness of the material that would result in

strain-induced defects; forming an amorphous oxide interface layer containing at least silicon

and oxygen at an interface between the monocrystalline perovskite oxide film and the

monocrystalline silicon substrate;

epitaxially forming a layer of intermetallic compound overlaying the monocrystalline perovskite

oxide film and epitaxially forming a monocrystalline compound semiconductor layer overlying

the layer of intermetallic compound claims.

[Claim 17] A process for fabricating a semiconductor structure comprising the steps of.

providing(, a monocrystalline substrate,

epitaxially growing [an] accommodating buffer layer overlying the monocrystalline substrate*,

forming an amorphous layer on the monocrystalline substrate during the growth of the

accommodating buffer layer-, and

forming a monocrystalline conductive layer over the accommodating buffer layer-,

[Claim 191 epitaxially ...rowing an additional monocrystalline layer above the monocrystalline

conductive layer-,

[Claim 20] wherein the step of [claim 19] includes ~rowing a semiconductor material layer.

S.N. 09/986,024, claim 169:

10.   A process for fabricating a semiconductor structure comprising:

providing a monocrystalline silicon substrate;

depositing a monocrystalline perovskite oxide film overlying the monocrystalline silicon substrate, the film having a thickness less than a thickness of the material that would result in strain-induced defects;

forming an amorphous oxide interface layer containing at least silicon and oxygen at an interface between the monocrystalline perovskite oxide film and the monocrystalline silicon substrate; and

epitaxially forming a monocrystalline compound semiconductor layer overlying the monocrystalline perovskite oxide film.

11.   A comparison of the claims shows that all three applications set forth the method steps of providing a monocrystalline substrate; an accommodating buffer (or perovskite) layer; an amorphous oxide interface therebetween; and at least a monocrystalline semiconductor layer over the buffer/perovskite. The respective sets of claims are not identical because:

12.   Claims 17, 19 and 20 of the '340 application are broader than claim I I of the '892 application because the '340 claims do not further require that the monocrystalline substrate be Si-I that the amorphous oxide interface layer also contain silicon-, that the accommodating buffer specifically be a monocrystalline perovskite; that the conductive layer specifically be an intermetallic compound; nor that the monocrystalline semiconductor layer be a compound monocrystalline semiconductor layer.

13.   Claim 169 of the '024 application is broader than claim I I of the '892 application because the '024 claim does not require the additional presence of the epitaxially grown intermetallic compound layer.

14.   Accordingly, claims 17, 19 and 20 of the '340 application are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim I I of the

copending '892 application. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 11 of the '892 application anticipates claims 17, 19 and 20 of the '340 application as explained above. See e.g., In re Berg. 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); Iti re Goodniati, 11 F. 3 d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); 111 re Lotigi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985) for the proposition that an obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claim(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). This is a 12rovisiona obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. 12. Similarly, claim 169 of the '024 application is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of the copending '892 application. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 11 of the '892 application anticipates claim 169 of the '024 application as explained above. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15.   While not specifically addressed herein, similar double-patenting conflicts also exist between the product claims of various applications as well. Moreover, while the Office has a long established policy of generally requiring restrictions between semiconductor product claims (class 257) and method claims (class 438) in a given application, this policy does not negate Applicant's responsibility for ensuring that no conflicts exist between those applications presenting product claims and those applications presenting method claims. This is because it is

also well established agency policy that restricted product and method claims may be subject to

rejoinder during the course of prosecution. See MPEP 821.04.

Conclusion

16.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to W. David Coleman whose telephone number is 703-305-0004.

The examiner can normally be reached on 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-308-7722 for regular

communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0956.

W. David Coleman
Examiner
Art Unit 2823

WDC
March 5, 2003